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News Bulletin of The Entomological Society of Victoria Inc.

THE ENTOMOLOGICAL SOCIETY OF VICTORIA (Inc)

MEMBERSHIP

Any person with an interest in entomology shall be eligible for Ordinary membership. Members of the Society include professional, amateur and student entomologists, all of whom receive the Society's News Bulletin, the Victorian Entomologist.

OBJECTIVES

The aims of the Society are:

(a) to stimulate the scientific study and discussion of all aspects of entomology,
(b) to gather, disseminate and record knowledge of all identifiable Australian insect species,
(c) to compile a comprehensive list of all Victorian insect species,
(d) to bring together in a congenial but scientific atmosphere all persons interested in entomology.

MEETINGS

The Society's meetings are held at the 'Discovery Centre', Lower Ground Floor, Museum Victoria, Carlton Gardens, Melway reference Map 43 K5 at 8 p.m. on the third Tuesday of even months, with the exception of the December meeting which is held on the second Tuesday. Lectures by guest speakers or members are a feature of many meetings at which there is ample opportunity for informal discussion between members with similar interests. Forums are also conducted by members on their own particular interest so that others may participate in discussions.

SUBSCRIPTIONS (2010)

Ordinary Member	$30 (overseas members $32)
Country Member	$26 (Over 100 km from GPO Melbourne)
Student Member	$18
Electronic (only)	$20
Associate Member	$ 7 (No News Bulletin)
Institution	$35 (overseas Institutions $40)

Associate Members, resident at the same address as, and being immediate relatives of an ordinary Member, do not automatically receive the Society's publications but in all other respects rank as ordinary Members.

LIFE MEMBERS: P. Carwardine, Dr. R. Field, D. Holmes, Dr. T. New, Dr. K. Walker.

Cover design by Alan Hyman.

Cover photo: *Megaceria sp.VE 41 (2) p39*
Photographer John Tiddy, a member of the Victorian Nature Photography Group with an interest in insects, has provided this photo using a white background photography technique. In this case the wasp has it's abdomen elevated due to the cold weather when it was found. An article expanding on this method of photography is included in the February 2011 bulletin.

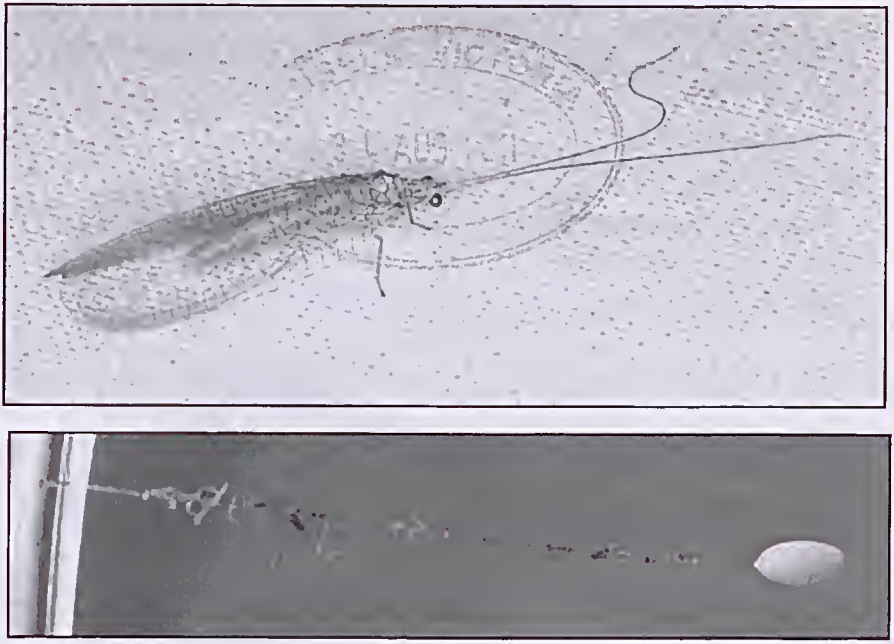
Notes from Members Meeting 21 June 2011

Present:
Members: Ken Harris, Peter Carwardine, Laura Levens, David Stewart, Jim Tuttle, Marilyn Hewish, Joshua Grubb, Linda Rogan, Peter Lilywhite, Peter Marriott Guests: Margaret Kesavon, David Mules, Patrick Honan

Apologies:
Ian and Margaret Endersby, Steve Curle, Daniel Dobrosak,

This member's presentation night was packed with invertebrate biodiversity.

Ken Harris began with a presentation on Neuroptera, The Lacewings. Many of these were photographed as a side attraction while light trapping for moths in Morwell National Park and some from a Field Naturalists visit to Gelantipy.



First and most common was a green lacewing (Chrysodidae) *Apertochrysa edwardsi.* (upper photo above—K. Harris). This delicate creature had been kept in a jar overnight. Surprise benefits were delicate eggs on hairlike stalks in the morning. Photos included a close-up of an egg (lower photo above—K. Harris).

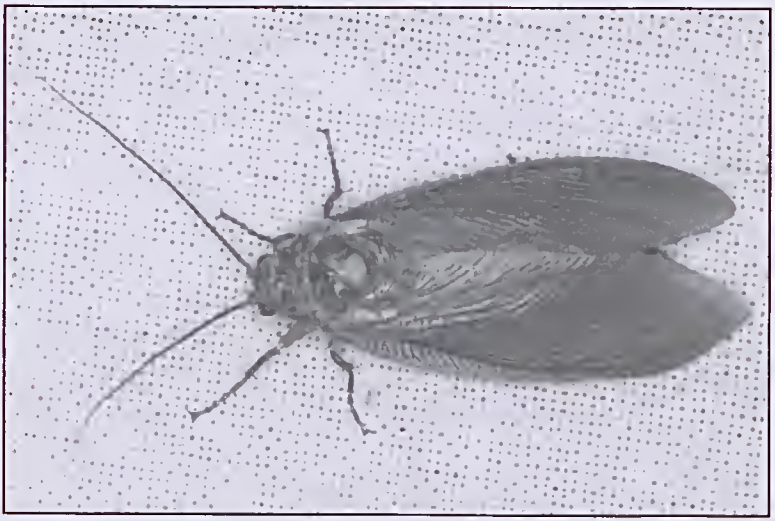
Another Green lacewing with distinctive wings is *Nothancyla verreauxi.*

A brown lacewing from the Hemerobiidae family was an unidentified species from Morwell.

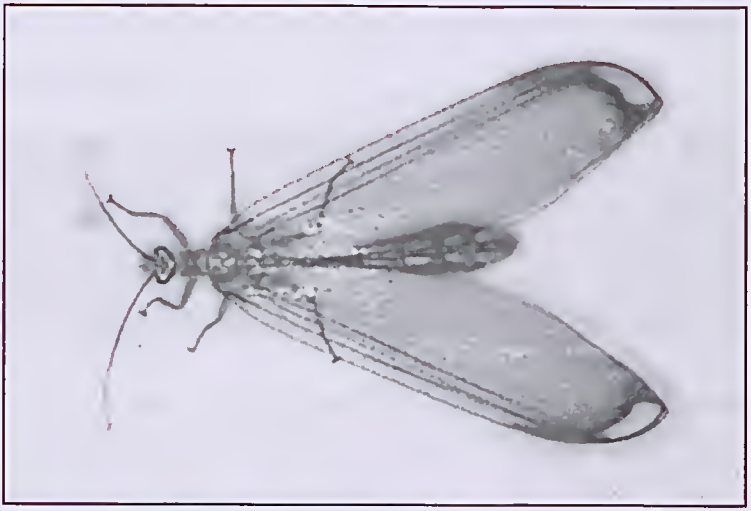
Also brown in colour was a member of the Osmylidae family a *Stenosmylus* sp.

A particularly natty Pied Lacewing *Porismus strigatus* (Osmylidae) came from Yarragon south and has been common in Melbourne this year.

A Beaded Lacewing *Spermophorella sp.*,(Berothidae) was from Churchill.

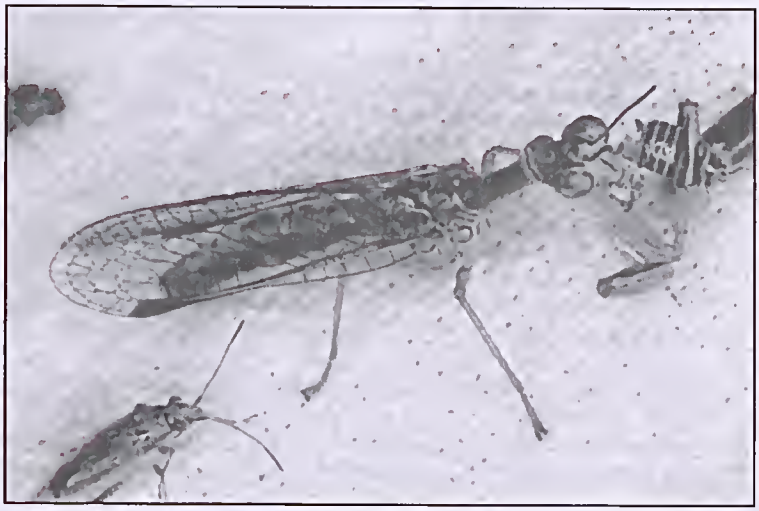


The Moth Lacewing *Ithone pallida* (Ithonidae) (photo above - K. Harris) was from Holey Plains.



Gelantipy produced the Blue Eyes Lacewing *Nymphes myrmeleonides* (photo above—K. Harris), from the Split-footed lace wing Nymphidae family.

Three Ant-lions (Myrmeleontidae) presented were the large sized *Helioclisis fundata,* medium sized *Myrmeleon acer,* and a smaller unknown species.



Mantispidae family was represented by *Ditaxis meridiei* and four *Campion* species (photo above *Campion impressus*—K. Harris) that aggressively devoured flies on the light sheet.

Final photos were of Striped Earwigs *Labidura truncata* (Labiduridae) with folded wings nearly invisible.

The next presenter was Laura Levens with *Invertebrates in My Patch of Bush.* This was a look at some of the critters from her property in Upper Beaconsfield some of which were named to species and some that she hoped members could identify for her. She started with Leaf Hoppers including blue *Dworena repleta*, Grass hoppers and *Tropidoderus childrenii*, Children's stick insect.

Next flies and a wasp, moths *Chloroclystis approximata*, a male and another identified as *Aeolochroma metarhodata* by Marilyn Hewish.

Further photos of bugs that included Jumping Ants, wasps and a variety of beetles. Also Dragonflies, damselflies, cockroaches and crickets. There was one ant that mimicked a spider. She finished with some Neuroptera including an ant lion and an unknown larva.

Laura's property is obviously a very lively place. Laura wants to send her thanks to "those who wracked their brains for information."

Jim Tuttle passed around two 6th instar larvae of *Coequosa triangularis* feeding on *Banksia integrifolia.* These are remarkable in that they develop through 8 instars and become Australia's largest hawkmoth. Watch for these in Jim's upcoming book.

Patrick Honan presented photos from two trips he had made to Cairns, Cape Tribulation and the Iron Range. He showed a bewildering array of crickets (including some with attitude), Katydids, moths, spiders, mantids, stick insects, flies, dragonflies, ants, beetles and a centipede amongst spiderlings. Many of these, like the Wallace's Longicorn Beetle *Batocera wallacei*,

show a close connection to the Papuan fauna.

He finished with a reminder to members about the Australian Invertebrates Conference at the Melbourne Zoo 28th June to 1st July 2011.

The last presenter was David Stewart who had made a range of observations at Mount Korong near Wedderburn. These included the nesting of Leaf Cutter bees using discs cut from rose bush leaves. What did they use prior to rosebushes?

He observed generally that after two wet years since years of drought, this year he has seen a huge number of insect and spider predators. Wasps were chief amongst these and David has been observing to see how many spiders they chose to place in nests with their eggs.

Gastrupiid wasps were also observed in attempts to predate nest of Resin Bees.

Interesting observations were made in association with the Grey Mistletoe where the *Delias* butterfly larvae were all parasitised by a wasp. An azure butterfly was also photographed on this mistletoe.

We are eagerly awaiting one or more bulletin articles that will result from these observations.

Business
With the absence of the treasurer and secretary reports were deferred.

The third moth book (MoV3) on two geometrid subfamilies (Larentiinae and Sterrhinae) has now been published. Peter drew attention to the number of images and information now being offered by others and which have enhanced the publication very positively. Members attention is drawn to the member's discount of $2.00 which is available for all three books.

The minutes of the meeting of 19th April 2011 were moved for acceptance and seconded by Peter Carwardine.

The next general meeting will be the third Tuesday of August at the Discovery Centre.

Meeting closed at 9:50

The heliotrope moth, *Utetheisa pulchelloides* in Tasmania

LIONEL HILL
Department of Primary Industries, Parks, Water & Environment,
Tasmania, P.O. Box 303, Devonport 7310.

I was prompted by Ian Endersby's remark in *Victorian Entomologist* 41(3): 59 (June 2011) that memory [of outbreaks of insect populations] is fickle, to collate records of the heliotrope moth, *Utheisa pulchelloides* Hampson from sources within Tasmania's agricultural department.

Common (1990, p434) described *U. pulchelloides* as occurring, 'throughout Australia and Tasmania, where the larvae feed on Boraginaceae, including *Argusia argentaea*, *Myosotis* (forget-me-not) and the introduced weeds *Heliotropium europaeum* (heliotrope) and *Echium plantagineum* (Paterson's curse).' McQuillan and Forrest (1985, p24) said the range is 'most of Australia' and the flight period, 'September-May, peaks January, April.' Zborowski and Edwards (2007, p182) said it is 'widely distributed in northern Australia ... often reaching southern Australia in large numbers where it feeds in Paterson's Curse.' In New Zealand it is recognised as a sporadic immigrant, 'occasionally establishing for a summer but not known to survive the winter' (Dugdale, 1988, page 194).

The Tasmanian Plant Pest Database (TPPD) summarises specimens or diagnostic reports held by the state agricultural department, now part of the Department of Primary Industries, Parks, Water and Environment. TPPD records 80 specimens of *U. pulchelloides* reflecting 37 series, each of 1-10 specimens. Of these, 34 specimens in 19 series are from Stony Rise light trap near Devonport which is discussed in detail below. All 80 specimens are adults, mostly collected by light trap and no larval specimens or reared adult material exists in the collection. The earliest records are two specimens from Strahan on 10 and 22 October 1899. The monthly frequency of specimens is October (5), November (2), February (4), March (14), April (9) and May (4). The localities are Arthur River (May 1993), Bridport (March 1992), Burnie (April 1955), Devonport (April 1953), Elliott (April 1955), Forthside (April 1986), Hobart (March 1974), Ouse (March & April 1959), Port Sorell (November 1990), Stanley (April 1993) and Strahan (October 1899) as well as Patriarch River on Flinders Island (March 1993). The northerly bias may or may not be an artefact reflecting the location of collectors and light traps operated by the department in the past but the seasonal picture broadly agrees with more detailed records from one trap at Devonport over 14 years as presented below. In addition, TPPD has a non specimen record of the moths being abundant on a house wall and garden at Huonville in March 1974.

A more definitive seasonal picture and some annual comparisons are offered by data from a 160W mercury vapour light trap of Rothamsted pattern that was operated at Stony Rise, Devonport from 1992 to 2006 and again in 2010-11 with interruptions in early 1996 and early 1998 (Table 1). *U. pulchelloides* was very abundant in north western Tasmania in the first half of 1993. Flight activity occurs in spring and summer but is much greater in autumn. Consideration (below) of other species in the largest catches suggests the autumn flights reflect immigration rather than local breeding. Archives available online through the Bureau of Meteorology (post December 1999) indicated that suitable warm, northerly airflows coincided precisely with the nights of several sudden peak catches in March and April of 2004, 2005 and 2011.

Table 1. Counts of *Utetheisa pulchelloides* moths trapped at Stony Rise, Devonport, in period 1992-2011grouped by week. Omitted winter weeks always nil. -, no data.

Week	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	10	11
1-7 January	0	0	0	0	-	0	-	0	0	10	0	0	1	0	0	-	2
8-14 January	0	0	0	0	-	0	-	0	0	2	0	1	0	0	0	-	4
15-21 January	0	1	0	0	-	0	-	0	0	0	0	0	1	0	0	-	0
22-28 January	0	0	0	0	-	0	-	0	0	1	0	0	2	0	0	-	0
29 Jan - 4 Feb	0	9	0	0	-	0	-	0	1	1	0	0	0	0	0	-	0
5-11 February	0	0	0	0	-	0	-	0	2	0	0	0	0	0	0	-	0
12-18 February	0	20	0	0	-	0	-	0	0	3	0	0	3	0	0	-	0
19-25 February	0	16	0	0	-	0	-	0	0	7	0	0	0	0	0	-	5
26 Feb - 4 Mar	0	3	0	0	-	0	-	0	0	4	0	0	0	0	0	-	21
5-11 March	0	1	0	0	-	0	-	0	1	4	0	0	0	0	0	-	114
12-18 March	0	120	0	0	-	0	-	0	6	24	0	0	1	0	0	-	14
19-25 March	0	732	0	0	-	0	-	16	4	22	0	5	0	0	0	-	1
26 Mar - 1 Apr	0	870	0	0	-	0	-	39	5	1	0	0	16	0	0	-	0
2-8 April	0	5	0	0	-	0	-	2	0	2	0	1	3	76	0	-	0
9-15 April	0	431	0	0	-	0	-	0	7	31	0	0	47	167	0	-	8
16-22 April	0	460	0	0	-	0	-	0	0	9	0	0	12	0	0	-	2
23-29 April	0	908	1	0	-	0	-	0	2	4	0	0	12	6	0	-	0
30 Apr - 6 May	0	18	0	0	-	1	-	0	17	0	0	0	2	1	0	-	0
7-13 May	0	0	2	0	-	0	-	0	0	0	0	0	0	0	0	-	0
14-20 May	0	0	0	0	-	0	-	1	0	0	0	0	0	0	0	-	0
21-27 May	0	1	0	0	-	0	-	29	0	0	0	0	0	0	0	-	0
28 May - 3 Jun	0	1	0	0	-	0	-	0	0	0	0	0	0	0	0	-	0
17-23 September	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
24-30 September	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-7 October	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0
8-14 October	1	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0
15-21 October	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-28 October	0	0	0	0	0	4	0	0	1	0	0	0	0	1	0	0	0
29 Oct - 4 Nov	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
5-11 November	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
12-18 November	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
19-25 November	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26 Nov - 2 Dec	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	2	0
3-9 December	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
10-16 December	2	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0
17-23 December	3	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0
24-31 December	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0
Annual total	9	3596	3	0	-	9	-	92	57	125	0	10	99	251	0	-	171

Most of the biomass in the Stony Rise trap in spring are Noctuidae that are probable migrants whereas in autumn, local noctuid species of *Proteuxoa* Hampson predominate. Immigrants arrive many times every year. Hill (1993) showed on the basis of adult colour that flights of the native budworm, *Helicoverpa punctigera* (Wallengren) in spring and early summer in northwestern Tasmania were migratory and Hill (2007) showed that similar flights of common cutworm or bogong moth, *Agrotis infusa* (Boisduval) and brown cutworm, *A. munda* Walker were migratory because there was no evidence of winter breeding in Tasmania. Southern armyworm *Persectania ewingii* (Westwood) (Helm, 1975; Drake, Helm and Readshaw, 1981), the diamondback moth, *Plutella xylostella* (Linnaeus) and *Chrysodeixis* species (mostly tobacco looper *C. argentifera* (Guenée)) migrate to Tasmania in spring and later, breed locally in summer so that autumn flights potentially have two origins. They also have tenuous local populations in winter. Dugdale (1988) regarded cabbage-centre grub *Hellula hydralis* Guenée and the noctuid *Athetis tenuis* (Butler) as vagrants to New Zealand. The latter has only been recorded once as a larva in Tasmania (TPPD: Kindred, April 1989, potato) but is frequently light-trapped. Fox (1978) regarded *Cosmodes elegnus* Donovan as a rare vagrant to New Zealand. Holloway (1982) indicated Lepidoptera that migrate to Norfolk Island. Infrequent vagrants to Tasmania, not known to breed locally, include the noctuids moths *Crioa luades* (Lower), *Rhapsa eretmophora* Turner, black cutworm *Agrotis ipsilon* (Hufnagel), inland armyworm *Persectania dyscrita* Common, soybean looper *Thysanoplusia orichalcea* (Fabricius), rough bollworm *Earais luegeliana* Gaede and *Earias parallela* Lucas. The eastern alchymist *Aedia leucomelas* (Linnaeus) and *Rhodina falculalis* Guenée may also be migrants although one of four records of the former is a specimen reared from a larva at Orford in April, 1979.

In 27 'spring' (July-December) weekly periods (as in Table 1) there were one or more catches (trap serviced at irregular intervals of one to several days) containing *U. pulchelloides*. Frequent or significant fellow travellers are summarised in Table 2 indicating that migration of various species was occurring in those weeks. Similarly in 70 weeks of the 'autumn' periods (January-June) fellow travellers provide evidence of many migratory events despite the uncertainty of geographic origin surrounding southern armyworm, cutworm, false loopers, budworm and diamondback moths.

Table 2. Percentage of 27 spring and 70 autumn catches in which certain species coincided with *Utetheisa pulchelloides*.

Species	spring	autumn	Species	spring	autumn
Persectania ewingii	41	54	*Athetis tenuis*	30	56
Persectania dyscrita	0	10	*Cosmodes elegans*	4	11
Mythimna convecta	4	4	*Crioa luades*	19	1
Agrotis infusa	56	14	*Hypoperigea tousa*	15	3
Agrotis munda	56	19	*Rhodina falculalis*	4	4
Agrotis ipsilon	0	7	*Rhapsa eretmophora*	4	0
Chrysodeixis argentifera	22	31	*Aedia leucomelas*	0	1
C. eriosoma (Doubleday)	0	10	*Earias* spp.	0	4
C. subsidens (Walker)	4	3	*Plutella xylostella*	70	29
Thysanoplusia orichalcea	0	3	*Hellula hydralis*	19	31
Helicoverpa punctigera	56	53	Number of catches	27	70
Helicoverpa armigera	0	6			

The following weekly analysis of larger catches shows there were many occasions when *U. pulchelloides* coincided with migrant species in autumn.

1993: Week 26 Feb-4 March *Hypoperigea tonsa*; 12-18 March *Cosmodes elegans*; 26 March-1 April *Chrysodeixis subsidens*; 16-22 April *Persectania dyscrita* and eggfruit caterpillar *Sceliodes cordalis* (Doubleday) which had never before been seen in Tasmania other than as a caterpillar intercepted on fruit imports; 23-29 April *P. dyscrita*, *Earias paralella* and *Cosmodes elegans*; 30 Apr– 6 May *Hellula hydralis*.

1999: The catches of *U. pulchelloides* followed a cyclone in Western Australia. Week 26 Mar-1 April *H. hydralis*; 2-8 Apil *Earias luegeliana* and *Agrotis ipsilon*; 14-20 May *Hellula hydralis*; 21-27 May *Hypoperigea tonsa*, *P. dyscrita* and *H. hydralis*.

2001: Curiously the fortnight 12-25 February included many black field crickets *Teleogryllus commodus* (Walker), damsel bugs *Nabis kinbergii* and brown lacewings *Micromus tasmaniae* whose origin is puzzling; 5-11 March *Thysanoplusia orichalcea*; 19-25 March *T. orichalcea* and *A. ipsilon*.

2004: Currant lettuce aphid *Nasonovia ribisnigri* (Mosley) first appeared in Australia in Tasmania in early February, 2004 on easterly airflows from New Zealand that interrupted flights of *Uthetlesia* from the north. Week 9-15 April *C. elegans*, *H. hydralis* and many green mirid *Creontiades dilutus* (Stål), which have appeared during other migration events. Other sources provided a specimen of spur-throated locust, *Austracris guttulosa* (Walker) from Forthside near Devonport while Flinders Island reported temperatures of 28°C at 1AM on 15 April 2004. Week 16-22 April *A. ipsilon* and *H. hydralis*.

2005: Late March, immediately preceding flights of *U. pulchelloides*, many weed web moth, *Achyra affinitalis* (Lederer); 9-15 April *Earias luegeliana*, *H. hydralis* and many *Creontiades dilutus* (and many *Mallada* green lacewings); 16-22 April *H. hydralis* and *Creontiades dilutus*; 23-29 April *H. hydralis* and *Cosmodes elegans*.

2011: Cyclones Diana and Carlos off Western Australia. Week 19-25 Feb *Arnactica conchida* (Butler), which was previously caught at Stony Rise on 2 March 1995 and is otherwise unknown in Tasmania, *A. affinitalis*, *H. hydralis* and the second recorded appearance of adult *Sceliodes cordalis* in Tasmania; 26 Feb–4 March *A. ipsilon* and corn earworm, *Helicoverpa armigera* (Hübner); 5-11 March *Chrysodeixis subsidens*, *Cosmodes elegans*, *Acontia* sp. (*nivipicta* Butler?), *Creontiades dilutus* and *Hippotion scrofa* (Boisduval); week 9-15 April unidentified, novel hypenine noctuid moth.

The Bureau of Meteorology (Australian Government, 2011) indicates that 1992, 1994, 1995, 1997, 2002, 2003 and 2006 had substantial dry periods in many parts of Australia and these years correspond to low catches in the Devonport light trap. The periods 1998-2001 and 2010-11 are described as La Niña events with high rainfall and these years had higher catches but the years 2004 and 2005 with comparable catches are not so described. However, it was reported (Faithfull, pers. comm.) that Paterson's curse was unusually abundant in Victoria in late 2003. Notably, the outstanding year, 1993 is not described as an El Niño or La Niña year and rainfall in the months preceding the large catches seem to have been below average in the north and east of the continent but above average in parts of South Australia, Victoria and New South Wales in early 1993. Prior to March 1993 the Southern Oscillation Index had been generally negative since early 1991. In relation to the early records from TPPD the years 1955 and 1974 were La Niña years.

Although DPIPWE operated Rothamsted light traps at various localities around Tasmania commencing in 1953 at Elliott near Burnie the records enumerate only certain pests and were primarily used to forecast outbreaks of southern armyworm. However, some records of *U. pulchelloides* are available for 1992 and 1993. The Forthside trap, 10km west of Devonport, caught 85 and Elliott trap

caught four *U. pulchelloides* in April 1992 while none were caught at Stony Rise and a specimen was collected at Bridport in March 1992. In 1993, the Forthside trap caught 195 *U. pulchelloides* while Stony Rise trap caught 3569. These catches coincided with specimens collected at Arthur River, Stanley and Flinders Island as noted above.

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Peter Graeme Kelly, 30 June 1922 - 17 May 2011

Peter Kelly passed away peacefully on Tuesday 17 May 2011, at the age of 88 and after a long period of deteriorating health. His death marks the loss of one of the few remaining enthusiasts who guided the re-formed Entomological Society of Victoria during the 1960s, and the end of a lifetime interest in natural history.

Indeed, Peter was President of the Society in 1969-1970 (possibly from 1968: the Society's newsletter, Wings and Stings, was not published between 1966 and 1969, so that the succession over that period is not wholly clear. J.C. ('Zoo') Le Souef is listed as President from 1961-1965, and as immediate Past-President to Peter; however Zoo noted later that Jack Barnes became President in 1967-1968, and I have not been able to clarify whether Zoo again held the position after that, with Barnes' tenure cut short by a trip to England).

Peter's Presidential Address, on 23 April 1971, dealt with the insect group that occupied him so happily for much of his life, the paropsine beetles, illustrated by his own photographic slides. Photography was a keen interest and his skills come to the fore repeatedly at Society meetings; thus at the February 1970 meeting he showed 'some excellent slides of various insects', but he used his craft predominantly to produce a large photographic dossier of early stages and life histories of his favourite beetles, accumulating a unique and invaluable archive of his work. Example of Peter's photography can be found on the PaDIL website

(http://www.padil.gov.au/pests-and-diseases/Search?sortType=ScientificName&viewType=Details&pageSize=10&queryText1=Paropsis&queryType1=all)

That early period saw the Society maturing, and the newsletter evolve into the Victorian Entomologist, with its first issue in October 1971; Peter was a member of the editorial committee and contributed several notes and observations to early issues. He became President again from 1981-1983, and in the intervening period his wider natural history interests had been marked by Presidency of the Field Naturalists' Club of Victoria (1973-1976) of which he was a long-standing member. Peter continued his services to the Field Naturalists' Club by being the Club's librarian for several years.

The 'Vic. Ent.' was the outlet for most of Peter's scientific publications, with the note that created most interest being his discovery of a method to restore colour in long-dead paropsines - well known for their brilliant life hues disappearing to leave rather drab brownish beetles that superficially 'all look the same'. His photographs dramatically showed the differences between the living and dead beetles. Peter's studies on this taxonomically complex group were characteristically patient, painstaking and thorough. His daughter, Margaret, remembers well the rows of glass coffee jars used to rear beetles, and (in her eulogy for her father) recalled that family holidays involved stops, not at noted scenic or tourist waystops, but governed more by sighting suitable young eucalypts that might harbour novel beetles – when she and her brother Stephen were enlisted in searching for these.

A single, seminal paper (co-authored with C.A.M. Reid) marked the culmination of decades of study and agonising over generic limits within the Australian paropsines, and frustrations over problems of trying to allocate species resolutely to one or other possible genus. He was, of course, not the first coleopterist to face this problem - but he was one of the first to confront it squarely and with immense practical experience of the insects in the field as well as under the microscope. Many

past taxonomic authors published new paropsine genera without nominating a type species for each new genus – thus leaving landmine-like problems to "explode" when some unsuspecting entomologist ventured into the taxonomy of these insects. So, there was a pressing need for someone to "simply!" establish stability for the paropsine generic nomenclature. Peter and Chris Reid's paper (1999, Memoirs of Museum Victoria 57, 263-266) resolved the type species issue by designating for the first time type species for all genera within the subtribe Paropsina. This was an enormous task requiring rigorous examination of all original published papers and many of the original specimens used in the initial publications – sourcing those original elusive specimens and ambiguous papers took decades of dedicated work.

Peter's extensive collection of named beetles, together with the accompanying photographic archive, was given to the Australian National Insect Collection in 1983, and is amongst those acknowledged on the noticeboard within the collection room in Canberra. His reputation was recognised also by his receiving (in 1982) the Entomological Society of Victoria's Le Souef Award for contributions to entomology by an amateur. For this, he elected to receive a copy of Roy Crowson's classic book (1981, The Biology of Beetles).

Peter Kelly was born in Prahran, Melbourne, and educated at Scotch College. He became an industrial chemist and retired (in 1980) as chief chemist with Brella Pty Ltd. His early interest in insects developed in part from his lawyer father (Reginald Kelly) whose studies on thrips led to production of the first monograph on Thysanoptera in Australia (1934).

Following his retirement, Peter and Lorraine undertook a 'seachange', moving from Melbourne to a country property (aptly named 'Calomela', a name also of a genus of beetles) at Tallarook, where they lived for about a decade before returning to Melbourne.

Peter's interests in genealogy developed in later life, and the enthusiasm earlier devoted to beetles and photography (and to other interests such as the Victorian Mountain Tramping Club, of which he was a founder member, from 1948) then enabled him to trace his family lineage back over some 500 years.

His love of reading and classical music never waned.

I met Peter first in the early 1970s, and enjoyed the pleasures of an enduring friendship with him and his family, as well as learning much - of beetles and life - from our talks.

Peter will be remembered for his wise counsel and mentorship to many young and aspiring entomologists and other naturalists in Victoria, and for his painstaking studies on paropsine beetles over many years.

Tim New

A Tale of Two Species: new data and new populations of *Trapezites lutea lutea* and *Jalmenus icilius* in Victoria

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Over the past three spring seasons, Riddells Creek Landcare has been monitoring a rare orchid population in Riddells Creek for DSE, as well as developing a management plan for the area and conducting DSE-funded conservation activities. This short stretch of rail reserve either side of Riddells Creek contains numerous EPBC- and FFG-listed plant species on a patch of critically endangered Grassy Woodland (EPBC-listed ecological community), and another plant that was recently re-discovered after being thought to be extinct for a hundred years.

The Find

After completing the last orchid activity of the season on December 16 2010 (counting pollinated orchid flowers forming seedpods), while walking back I noticed a skipper butterfly - it took my eye because of a distinctive yellow flash while in flight. I'd not seen a yellowish skipper butterfly in the area so tried to get a photo. It was very flighty and I only got one photo from quite a distance away, and this photo was only of the butterfly's upper side. I continued walking and saw another butterfly I didn't recognise. This time it took my eye because of a blue flash while flying. This one was far more cooperative and sat nicely on a Blackwood (*Acacia melanoxylon*), allowing me to get good photos of the upper and underside. I also noted some caterpillars on the same bush so took some photos of those too.

Figure 1. The only photo taken of the skipper on December 16, 2010

The Initial ID

With many other activities on at the time, it was a week before I looked at the photos with a view to IDing the butterflies. I quickly worked out that they weren't butterflies I'd seen in the area before by comparing with other locally-taken photos. It was then a case of going through the Museum's Bioinformatics website and Braby's two-volume 'Butterflies of Australia' (2000) to work out what they

were. The 'blue' seemed to be clearly identifiable as *Jalmenus icilius* (sensu Braby) (Icilius Blue or Amethyst Hairstreak). Further research pointed me to the fact that this was a rare butterfly in Victoria and protected via the Flora and Fauna Guarantee Act (FFG). With the lack of any of the named host plants for *Jalmenus icilius* on the site (Blackwoods aren't listed as a host plant), there was plenty of room to develop doubt of the ID in my mind.

Skippers are always more difficult to identify (for me) but, despite having only the upperside to help me, the markings seemed to only fit another FFG-listed butterfly, *Trapezites lutea lutea* (sensu Braby) (Yellow Ochre or Rare White-spot Skipper). The word 'lutea' means 'yellow' and looking at the habitat and food plant description everything seemed to fit well, but there was no photo of the 'white spot'.

Site Revisit

It was Christmas Eve but the disbelief at not only spotting two new species for my local area, but them both being FFG-protected species was enough to get the juices flowing. This was particularly important because that week, I'd received a copy of the final draft of the Management Plan for the site from Atlas Ecology which included management processes but for only the rare plants, including fire regimes, weeding, etc.

On returning to the site, *Jalmenus icilius* seemed to be there in reasonable numbers and I quickly found ants and caterpillars so took numerous new photos of a few individuals. But there was no sign of the skipper so I only had the one photo to go by.

Figure 2. *Jalmenus icilius* on *Acacia melanoxylon* at Riddells Creek on December 24, 2010.

Expert ID

With species protected by law, it is advisable to seek the opinion of others. I initially emailed Peter Marriott who sent it on to Michael Braby, Ross Field and Kelvyn Dunn. Everyone confidently agreed with my initial ID. This was surprising to me as I was expecting at least some doubt over the ID of the skipper. This ID confirmed the first piece of new information, that this record was a previously unrecorded host plant for *Jalmenus icilius* (*Acacia melanoxylon*, Blackwood). Ross has since found that others have recorded Blackwoods as hosts in Victoria (informally). As it turned out, because *Trapezites lutea* has two flying episodes, I had probably stumbled across the end date of their first flying period at this site (Dec 16-24). Michael suggested it all be written up here, while Ross and Kelvyn were keen to see the butterflies and help in whatever way they could re management. I was particularly keen for them to see the site and to quiz them about ecology and habitats with management of the land in mind.

Site Visits by Experts

It was January when Ross Field visited. I was initially disappointed because, as we approached the first Blackwood where I'd seen the Jalmenus on every visit previously, there was no sign of it flying. The Jalmenus has a distinctive flight and tends to fly around only 1-few host plants (in this case 1-3m tall *Acacia melanoxylon*, Blackwood – NB. Being a basalt grassland area the Blackwoods tend to be more shrub-like, growing to 1-3m tall at this site). As we moved closer to the plant, Ross noticed two individuals perched at the top of the plant and they were mating. We spent some time around this plant because it also had eggs and caterpillars and ants in abundance. While there, and quizzing Ross about the signs to look out for for the *Trapezites lutea* caterpillars, I noticed some *Lomandra filiformis* subsp. *coriacea* (the Trapezites host plant) at my feet, and there we found a caterpillar (at the base of the Lomandra, hidden between two leaves it had gelled together). As we moved further around the site, Ross also found *Jalmenus evagoras evagoras* (sensu Braby) caterpillars (none were flying that day but they have since been recorded there) and more Trapezites caterpillars in a large patch of *Lomandra filiformis*.

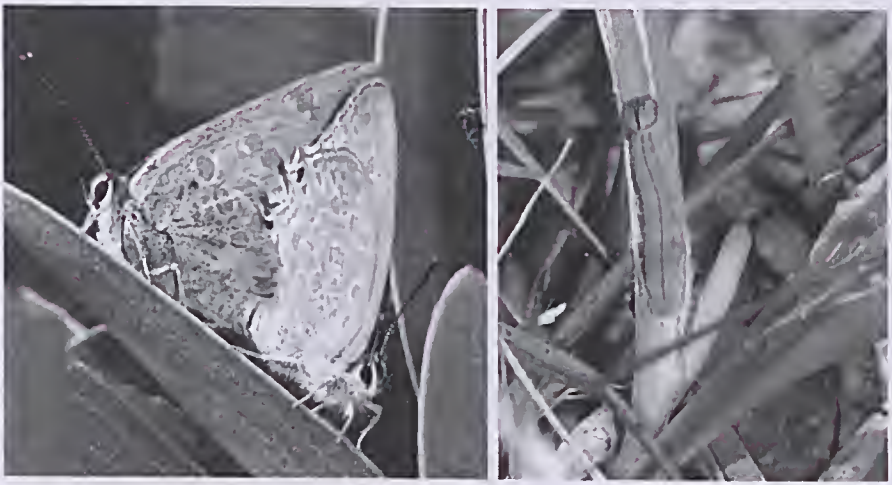

Figure 3. Mating *Jalmenus icilius* and *Trapezites lutea* caterpillar, January 5, 2011

Kelvyn Dunn visited in February at about the time when the Trapezites were due to re-emerge for their second flying period. Unfortunately no adult Trapezites were seen but *Jalmenus icilius* was

again commonplace. Apart from the attendant ants, the Jalmenus caterpillars were co-habiting and co-utilising ants with *Sextius virescens* (Acacia Horned Treehopper, Green Treehopper). We also spent time travelling around the Riddells Creek area and found two previously unrecorded butterfly species for the area and possible evidence of a third after following up a 1930 record in Kelvyn's database by George Lyell for *Tisiphone abeona albifascia* (sensu Braby) (Varied Sword-grass Brown) assigned the text 'Riddell' by Lyell. A week or so later I confirmed this by seeing four individuals at the same location ... a small, remote and little known Lepidosperma/Gahnia swamp. Both Kelvyn and Ross left me with a number of jobs, not least of which was to follow the rare butterflies to the end of their flight period.

Figure 4. *Sextius virescens* on the same plant as *Jalmenus icilius* caterpillars and adults on February 10, 2011

Management Plan

The area had been managed by DSE previously and this included burning of the whole area. It is at best surprising that a full assessment of species for the area has never been conducted at the site. The rare orchids have driven the conservation and management of the site, and all the other species have been noticed since, at least in part only by chance. There is a side-track along the length of the reserve closest to the rail line and this track was not burnt as part of the management process. There are clusters of Blackwoods at 20-50m intervals along the track and almost all of these unburnt plants had *Jalmenus icilius* caterpillars and/or adults on them. The vast majority of Blackwoods, however, are in the main reserve area and possessed good new growth (two years post-burn growth) but Jalmenus (and ants) were found on only one or two of the burnt plants. Again, one can only speculate but the survival of *Jalmenus icilius* at this site is possibly more by luck than by good management practice. On the positive side, a successful management regime may have been stumbled upon (or re-emphasised), that being patch burning. I have been unable to access full details of the previous burn but good numbers of the Trapezites host plant also avoided burning along the side track and this is where almost all adults were noted.

Flight-time – new findings

The date when *Jalmenus icilius* and *Trapezites lutea* started flying in Spring was not recorded. The last record of *Jalmenus icilius* flying at the site was April 1st. This species has been recorded flying in April. The last (only) record of the first flying period of *Trapezites lutea* was on Dec 16th. The first record of the second flight period of *Trapezites lutea* at this site was one individual on Feb 25th. This represents a 2-month gap between flying periods.

Figure 5. *Trapezites lutea* (showing the white spot on wing underside) on March 6, 2011

Trapezites lutea has been recorded in March previously but not April (Braby, 2000; Dunn & Dunn, 2006 – although the latter presents one May record from Queensland). This year at Riddells Creek the Trapezites were recorded throughout April. The last record was April 27th. A search on a warm but overcast morning on May 1st was unsuccessful. That afternoon the first 'cold snap' of the season began and on the next sunny day (May 5) it was again not found. The flying season for these new populations of rare Victorian butterflies was over.

Figure 6. *Trapezites lutea* on April 27, 2011

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All photos in this article are sourced from NatureShare – http://natureshare.org.au/

A new state record – *Delias argenthona* Fabricius in Victoria – with commentary on *Graphium sarpedon* (Linnaeus), another butterfly reported from the state in 2011

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At the meeting in last December, I remarked on early evidence of conspicuous movements of migratory species into Victoria and encouraged readers to forward unusual butterfly records to me, as it seemed that the summer and autumn seasons might prove remarkable. Later, at the General Meeting in April I summarised the forthcoming evidence and reported that some 120 records of interest had come to hand at the time of report. An overview of these was presented at that meeting and four invasive species were briefly discussed as examples. That outline was published in the June edition (see pp. 54-57 with some additional photos on p.45) for the interest of those who were not present as well as for the historic record.

The summary had listed the Blue Triangle, *Graphium sarpedon*, a conspicuous butterfly that is known to expand its range very occasionally. There are at least two historic reports from the ACT (Dunn & Dunn 1991), for example, where the species is not a breeding resident. Although there were no sightings of *G. sarpedon* in the earlier atypical seasons of 1972-73 and 1973-74 (Quick 1974) – a time one might have expected a southerly incursion – it is now evident that the species can reach Victoria in exceptional years of heavy summer rains. The encounter at Mallacoota on 20-21 January this year (an adult was seen on two consecutive days in the township by Dr Russell Best) is to be taken as the first authentic record of a natural invasion of this species into far-eastern Victoria. There were rumours of its occasional presence lurking in the literature of the 1980s though. Dunn and Dunn (1991) earlier shelved two rather dubious reports as unconfirmed. The first comprised a vague statement of vagrant occurrence in East Gippsland but lacked any specific details. The second, from Toorloo Arm (near Lake Tyers), was reported by proxy based on circumstantial evidence gathered after the event, raising a need for some caution, "despite the plausible behaviours described and which rally to its support" (Dunn 2010: 12). Braby (2000) followed suite in maintaining the range limit as southern NSW as did Orr and Kitching (2010) the following decade. In reporting scientific information, as Endersby (2011: 59) has recently admonished, being "anecdotal is not enough", and "memory is fickle" as he reminded too, irrespective of whether it has been supplied by a trustworthy source or an accredited observer. Field-reports of facts or observed behaviours must be anchored in contemporaneously written notes in order to support supposition or any modification to temporal or spatial baseline data.

Some fifty more records of interest (most involving *Papilio aegeus, P. demoleus, Polyura sempronius* & *D. plexippus*) have been compiled since my briefing at the April meeting. Included among these (and of great interest too) were two reports of *Delias argenthona* south of the Murray River. These represent the first records of the species from Victoria. Photographs of both adults (Figures 1 & 2) support their authenticity, and the captions give the baseline information for each encounter. The previous southernmost record of this species was in the Murray valley region in NSW, and occurred in the 1973-74 season when an adult was captured at the Murray River near Mathoura (Quick 1974). I hope that keen observers in the Murray valley region will seek out juvenile stages on suitable mistletoes this spring as some eggs may have been laid.

Figure 1. Female of the Scarlet Jezebel, *D. argenthona* feeding at flowers of a *Callistemon* sp. (Myrtaceae) near the Murray River, at 10km NE of Rutherglen Vic. (35°59′05″S, 146°31′58″E), 15 Feb 2011, in late afternoon, Jennifer Davidson. (Photo: Ian Fraser). The author confirmed the tentative identification (made by E. Collins) on receipt of the photo on 01 May 2011.

Figure 2. Male roosting on *Amyema miquelii* (Loranthaceae) growing on *Eucalyptus leucoxylon* (Myrtaceae) at about 31 km ESE of Wangaratta on the Great Alpine Rd, Vic. (36°29′S, 146°38′E), 13 Mar 2011, 0923h DST (0823h AEST), 4m above ground, J. Heywood. (Photo: Jan Heywood). This adult was in the company of four other *Delias* butterflies, which Jan said she "took to be Wood Whites (*D. aganippe*)", along with the adult depicted, at the time of the encounter. The author confirmed the identification as *D. argenthona* on receipt of the photo on 29 April 2011.Acknowledgments

All photographs used to supplement this report have been reproduced courtesy of the photographers who retain all rights. Ms Eileen Collins kindly supplied the relevant field data (with permission of the observers) for inclusion in the Dunn & Dunn butterfly database (Est. 1983) and later for-

warded the photographs of the Scarlet Jezebels to confirm the species involved. E. Collins and the author identified the plant substrates in the photographs. Dr Ross Field (DPI Vic.) kindly commented on this briefing prior to submission.

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CORRIGENDA – *Vic Ent.* 41 (3)

The photos for Figures 4 & 5 (which appeared on p.45) have been reversed. The female Orchard butterfly (*P. aegeus*) should have been adjacent the caption for Fig. 4 (to which the field data applied) and the male butterfly should have appeared adjacent the caption for Fig. 5 respectively,

The 'years and records' tabulated on p.57 should have directly followed the commentary on the White migrant. The 'Summary' should have directly preceded the 'Acknowledgements' section.

Come light trapping at Pound Bend
Warrandyte State Park
F.O.W.S.P.
Mark your calendar for 13 December 2011
BBQ from 6:30 and brief meeting at 8
followed by an evening of light trapping
and learning about some of the insects of WSP
A combined event for
Entomological Society of Victoria
and insect keen members of
Friends of Warrandyte State Park
Watch for details in October bulletin

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DIARY OF COMING EVENTS

Tuesday 16 August General Meeting at Museum 8PM:
Dr Mark Norman - head of Science at the Melbourne Museum will talk about recent finds by the Museum in the Lake Condah area in western Victoria. This will be supplemented by presentations from Josh Grubb and Peter Marriott on the terrestrial insects surveyed.

Tuesday September 20th

Council Meeting

Tuesday December 13th
Light trapping at Warrandyte State Park (see details page 84)

Scientific names contained in this document are *not* intended for permanent scientific record, and are not published for the purposes of nomenclature within the meaning of the *International Code of Zoological Nomenclature*, Article 8(b). Contributions may be refereed, and authors alone are responsible for the views expressed.

Inverts.